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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/528,229	03/18/2005	Daisuke Itoh	2005_0470A	6230
513 7590 09/18/2007 WENDEROTH, LIND & PONACK, L.L.P. 2033 K STREET N. W.			EXAMINER	
			WOOD, ELLEN S	
SUITE 800 WASHINGTON, DC 20006-1021			ART UNIT	PAPER NUMBER
			1709	,
			MAIL DATE	DELIVERY MODE
			09/18/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		Application No.	Applicant(s)				
Office Action Summary		10/528,229	ITOH ET AL.				
		Examiner	Art Unit				
		Ellen S. Wood	1709				
	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPLICATION OF THE MAILING DISTRICTORY IS LONGER, FROM THE MAILING DISTRICTORY OF THE MAILING DEPLY OF THE MAILI	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be will apply and will expire SIX (6) MONTHS from the country application to become ABANDOR	ON. timely filed on the mailing date of this communication. NED (35 U.S.C. § 133).				
Status							
1)	Responsive to communication(s) filed on						
		 action is non-final.					
-	,—						
,—	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Dispositi	ion of Claims						
4)⊠	4)⊠ Claim(s) <u>1-12</u> is/are pending in the application.						
	4a) Of the above claim(s) is/are withdrawn from consideration.						
	5) Claim(s) is/are allowed.						
6)⊠	⊠ Claim(s) <u>1-12</u> is/are rejected.						
7)	Claim(s) is/are objected to.						
8)[B) Claim(s) are subject to restriction and/or election requirement.						
Applicati	ion Papers						
9) The specification is objected to by the Examiner.							
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority ι	ınder 35 U.S.C. § 119						
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).							
a)⊠ All b)□ Some * c)□ None of:							
-/,	1.⊠ Certified copies of the priority documents have been received.						
	Certified copies of the priority documents have been received in Application No						
	3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).							
* See the attached detailed Office action for a list of the certified copies not received.							
Attachmen	tie)						
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)							
2) 🔲 Notic	e of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail	Date				
	b) ☑ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>03/18/2005</u> 5) ☑ Notice of Informal Patent Application 6) ☑ Other:						
5, <u></u>							

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Obuchi et al. (US 6,417,294).

In regards to claims 1-2, Obuchi et al. disclose an item that was formed from aliphatic polyester and a transparent nucleating agent (col. 1 lines 10-12). Crystalline aliphatic polyester is a type of aliphatic polyester that can be used in combination with the transparent nucleating agent (col. 2 line 37). Obuchi et al. disclose that crystallinity is increased in order to improve thermal resistance (col. 2 lines 26-27). It is known in the art that stretching a material will increase the crystallinity of said material. The higher crystallinity will improve the thermal resistance. The materials will have a higher crystal melting point than that of an un-stretched or untreated product. It is the Examiner's view that the stretched product having an a higher crystal melting point by at least 5°C would be inherent given that the purpose of stretching the product is to improve the crystal melting point. Obuchi et al. disclose that the molding and forming are generally carried out by common processes such as injection molding, extrusion, blow forming, inflation forming, contour extrusion, injection blow molding, vacuum pressure forming and spinning (col. 15 lines 30-33). The Examiner's view is that the

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Applicants use of "stretched" is a broad limitation, thus, "stretched" includes any form in where the material is formed from expanding the material such as in injection blow molding.

In regards to claim 5, Obuchi et al. disclose that the invention can also provide the aliphatic polyester formed item, which has a crystallization degree of 30% or more measured by X-ray diffraction (col. 16 lines 43-45).

In regards to claim 7, Obuchi et al. disclose that a container was formed from an injection blow-molding machine and was blown to expand twice in both the longitudinal and transverse directions (col. 27 lines 40-43). Thus, the container would contain the properties disclosed by Obuchi et al.

In regards to claims 8-9, Obuchi et al. disclose that the aliphatic polyesters includes a comopolymer of aliphatic hydroxycarboxylic acid such as glycolic acid (col. 8 lines 49-53).

In regards to claim 10, Obuchi et al. disclose the main purpose of the invention is to provide transparent and thermal resistance films (col. 2 lines 1-5).

In regards to claim 11, Obuchi et al. disclose a container was formed from an injection blow-molding machine, thus the product was stretched (col. 27 lines 40-43).

In regards to claim 12, Obuchi et al. disclose that the films and sheets prepared by the process of the invention can also be used for a laminate of multi-layer structures (col. 16-17 lines 66-67 and line 1).

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Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Obuchi et al. (US 6,417,294).

Obuchi et al. disclose the conditions in which the conditions of the article that was formed had a molding temperature of a temperature between 59°C-163°C. This range falls within the temperature range that the conditions that the film were formed which was around 45-60°C. Obuchi et al. disclose that a container was formed from an injection blow-molding machine and was blown to expand twice in both the longitudinal and transverse directions (col. 27 lines 40-43). Obuchi et al. disclose a film that contains the same materials as though claimed by Applicant.

Obuchi et al. is silent to disclose the sub and main dispersion peak temperature according to dynamic viscoelasticity measurements. However, the conditions in which the films were stretched for both Obuchi et al. and the Applicant are the same, thus the physical properties would be the same for the final film.

Additionally, It would have been obvious to one having ordinary skill in the art at the time the invention was made to have varied the stretching conditions to as to produce a highly crystalline material having the claimed properties. This is based on

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the general concept that Obuchi et al. recognize that the stretched product has improved thermal properties.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ellen S. Wood whose telephone number is 571-272-3450. The examiner can normally be reached on Monday-Thursday 7:30am-5:00pm EST Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, D. Lawrence Tarazano can be reached on 571-272-1515. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ellen S Wood

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